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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/601,779 9525 06/23/2003 Makoto Nakamura Saigoh C-301 EXAMINER 23474 01/23/2006 7590 FLYNN THIEL BOUTELL & TANIS, P.C. HARRIS, KATRINA B 2026 RAMBLING ROAD ART UNIT PAPER NUMBER KALAMAZOO, MI 49008-1631 3747

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
Office Action Summary	10/601,779	NAKAMURA, MAKOTO	
	Examiner	Art Unit	
	Katrina B. Harris	3747	
The MAILING DATE of this communication appeared for Reply	pears on the cover sheet with	the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.  after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin  earned patent term adjustment. See 37 CFR 1.704(b).	I36(a). In no event, however, may a reply by within the statutory minimum of thirty (3) will apply and will expire SIX (6) MONTHS c, cause the application to become ABANI	be timely filed  0) days will be considered timely.  6 from the mailing date of this communication.  DONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 23 J	une 2003		
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3) Since this application is in condition for allowa		s, prosecution as to the merits is	
closed in accordance with the practice under	•		
Disposition of Claims			
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdra	wn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-9</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	or election requirement.	•	
Application Papers			
9) The specification is objected to by the Examine	er.		
10) ☐ The drawing(s) filed on 23 June 2003 is/are: a		d to by the Examiner	
Applicant may not request that any objection to the		-	
Replacement drawing sheet(s) including the correct		, ,	
11) The oath or declaration is objected to by the E.		•	
Priority under 35 U.S.C. § 119			
		40( ) (1) (0	
12) △ Acknowledgment is made of a claim for foreign  a) △ All b) ☐ Some * c) ☐ None of:		19(a)-(d) or (f).	
1. ☐ Certified copies of the priority document	•	Banklan Nia	
2. Certified copies of the priority document	• •	<u> </u>	
3. Copies of the certified copies of the prior	•	ceived in this National Stage	
application from the International Burea	, , , ,		
* See the attached detailed Office action for a list	oi the certified copies not rec	ceivea.	
Attachment(s)			
	4) Interview Sum	mary (PTO-413) lail Date	
<ul> <li>Notice of Draisperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>06/23/03</u>.</li> </ul>		mal Patent Application (PTO-152)	

Application/Control Number: 10/601,779

Art Unit: 3747

#### **DETAILED ACTION**

The following is a first action on the merits of application serial no. 10/601,779 filed June 23, 2003.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipted by Suzuki (6,655,843). Suzuki discloses a crankshaft supporter comprising:
a support member which is attached to a cylinder block of an engine to support a crankshaft (8) and which is formed of a matrix of aluminum alloy with a preform cast (50) inside; said support member having a mounting surface in contact with an attachment surface on said cylinder block (4), a bolt hole (18-2) corresponded to a bolt

hole in said cylinder block (4) and opened to said mounting surface, and a dowel hole in coaxial alignment with said bolt hole and opened to said mounting surface; said preform (50) having a penetrated section in which a through hole defining said bolt hole is formed; and said support member having a recess section which is formed of said matrix so as to shape said dowel hole, said recess section being positioned between said mounting surface and an opposing surface of said penetrated section that faces said mounting surface with said dowel hole being formed entirely within said recess section.

Regarding claim 2, wherein: said support member has a plurality of bolt holes (18-2) therein; and said dowel hole is defined to open to said mounting surface of said support member in coaxial alignment with at least one said bolt hole.

Regarding claim 3,wherein said preform (50)has said opposing surface displaced in a depth direction of said dowel hole so that said recess section formed of said matrix is defined between said mounting surface of said support member, where said dowel hole is formed, and said opposing surface of said penetrated section that faces said mounting surface of said support member.

Regarding claim 4, wherein said preform (50) includes a center section which defines an arcuate bearing cavity therein, and a pair of said penetrated sections disposed on opposite sides of said center section and each having a said through hole defining said bolt hole formed therein; said recess section and the dowel hole associated therewith being associated with only one of said penetrated sections, the opposing surface of said one penetrated section being spaced downwardly a substantial

distance from the mounting surface of the support member so that the depth of the dowel hole formed in the recess section is defined between said mounting surface and the opposing surface of said one penetrated section; and the other said penetrated section having an opposing surface thereon that faces the mounting surface of the support member and is spaced downwardly therefrom by a smaller distance so that the opposing surface on said other penetrated section is at an elevation above the opposing surface on said one penetrated section.

Regarding claim 5, wherein: said preform (50) includes a center section which defines an arcuate bearing cavity therein, and a pair of said penetrated sections disposed on opposite sides of said center section and each having a said through hole defining said bolt hole formed therein; each of said penetrated sections having a said opposing surface thereon which is spaced downwardly a small distance from the mounting surface of the support member, the opposing surfaces on said pair of penetrated sections being at the same height; said dowel hole being associated solely with one of said penetrated sections, said one penetrated section having an enlarged opening which surrounds the through hole and penetrates coaxially downwardly therealong through a selected distance away from said opposing surface; and the matrix defining said recess section penetrating downwardly and filling said enlarged opening to permit forming of said dowel hole which penetrates downwardly from said mounting surface into the matrix defined in said enlarged opening.

Regarding claim 6, a crankshaft supporter comprising: a support member which is attached to a cylinder block of an engine to support a crankshaft and which is

formed of a matrix of aluminum alloy with a preform (50) cast inside; said support member having a mounting surface in contact with an attachment surface on said cylinder block (4), a bolt hole corresponding to a bolt hole (18-2) in said cylinder block (4) and opened to said mounting surface, and a sleevelike dowel member in coaxial alignment with said bolt hole and protruding outwardly beyond said mounting surface; said preform (50) having a penetrated section in which a through hole defining said bolt hole is formed; said dowel section including a sleevelike forming member which is fixed to said preform in coaxial alignment with said bolt hole and which is cantilevered outwardly beyond said mounting surface; and said dowel section having an annular portion which is formed of said matrix and which projects outwardly from said mounting surface in surrounding relationship to said forming member to define a dowel which interfits in an opposed opening formed in said cylinder block (4).

Regarding claim 7,wherein said forming member is integrally and monolithically joined to said preform (50) and projects coaxially away from said opposing surface so as to penetrate outwardly beyond said mounting surface.

Regarding claim 8, wherein said forming member comprises a separate sleeve element which has one end fixed to said preform (50) in coaxial alignment with the through hole, said sleeve element projecting outwardly away from said opposing surface and outwardly beyond said mounting surface.

Regarding claim 9,wherein said preform (50) includes a center portion defining an upwardly-oriented concave bearing region, the perform also including a pair of said perforated sections positioned on opposite sides of said center section, each said

perforated section having an opposing surface which is spaced downwardly from said mounting surface, the opposing surfaces on said pair of perforated sections being in substantially the same plane.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 6,942,391 issued to Nakamura is a similar system.

## Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katrina B. Harris whose telephone number is 571-272-4842. The examiner can normally be reached on 6:30 AM -3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 571-272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katrina B. Harris

Examiner

Art Unit 3747

**KBH** 

Tony M. Argenbright
Primary Examiner
Art Unit 3747